

# Maria D Guillen

## List of Publications by Citations

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179  
papers

7,271  
citations

49  
h-index

76  
g-index

184  
ext. papers

8,058  
ext. citations

5.5  
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6.26  
L-index

| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 179 | Infrared spectroscopy in the study of edible oils and fats. <i>Journal of the Science of Food and Agriculture</i> , <b>1997</b> , 75, 1-11   | 4.3  | 373       |
| 178 | Bioavailability and risk assessment of orally ingested polycyclic aromatic hydrocarbons. <i>International Journal of Toxicology</i> , <b>2004</b> , 23, 301-33   | 2.4  | 360       |
| 177 | Characterization of edible oils and lard by fourier transform infrared spectroscopy. Relationships between composition and frequency of concrete bands in the fingerprint region. <i>JAOCS, Journal of the American Oil ChemistsnSociety</i> , <b>1997</b> , 74, 1281-1286                 | 1.8  | 240       |
| 176 | Fourier transform infrared spectra data versus peroxide and anisidine values to determine oxidative stability of edible oils. <i>Food Chemistry</i> , <b>2002</b> , 77, 503-510  | 8.5  | 236       |
| 175 | Rapid simultaneous determination by proton NMR of unsaturation and composition of acyl groups in vegetable oils. <i>European Journal of Lipid Science and Technology</i> , <b>2003</b> , 105, 688-696  | 3    | 142       |
| 174 | Usefulness of the frequency data of the fourier transform infrared spectra to evaluate the degree of oxidation of edible oils. <i>Journal of Agricultural and Food Chemistry</i> , <b>1999</b> , 47, 709-19  | 5.7  | 133       |
| 173 | Some of the most significant changes in the Fourier transform infrared spectra of edible oils under oxidative conditions. <i>Journal of the Science of Food and Agriculture</i> , <b>2000</b> , 80, 2028-2036  | 4.3  | 131       |
| 172 | Toxic oxygenated alpha,beta-unsaturated aldehydes and their study in foods: a review. <i>Critical Reviews in Food Science and Nutrition</i> , <b>2008</b> , 48, 119-36   | 11.5 | 128       |
| 171 | Semi-quantitative FTIR analysis of a coal tar pitch and its extracts and residues in several organic solvents. <i>Energy &amp; Fuels</i> , <b>1992</b> , 6, 518-525  | 4.1  | 125       |
| 170 | Aldehydes contained in edible oils of a very different nature after prolonged heating at frying temperature: Presence of toxic oxygenated <del>unsaturated</del> aldehydes. <i>Food Chemistry</i> , <b>2012</b> , 131, 915-926   | 8.5  | 123       |
| 169 | New Components with Potential Antioxidant and Organoleptic Properties, Detected for the First Time in Liquid Smoke Flavoring Preparations. <i>Journal of Agricultural and Food Chemistry</i> , <b>1998</b> , 46, 1276-1285   | 5.7  | 99        |
| 168 | Characterization of sacha inchi ( <i>Plukenetia volubilis</i> L.) oil by FTIR spectroscopy and 1H NMR. Comparison with linseed oil. <i>JAOCS, Journal of the American Oil ChemistsnSociety</i> , <b>2003</b> , 80, 755-762   | 1.8  | 97        |
| 167 | 2,6-Di-Tert-Butyl-Hydroxytoluene and Its Metabolites in Foods. <i>Comprehensive Reviews in Food Science and Food Safety</i> , <b>2015</b> , 14, 67-80  | 16.4 | 90        |
| 166 | A method based on 1H NMR spectral data useful to evaluate the hydrolysis level in complex lipid mixtures. <i>Food Research International</i> , <b>2014</b> , 66, 379-387   | 7    | 90        |
| 165 | Food as a source of polycyclic aromatic carcinogens. <i>Reviews on Environmental Health</i> , <b>1997</b> , 12, 133-46   | 3.8  | 89        |
| 164 | 1H nuclear magnetic resonance as a fast tool for determining the composition of acyl chains in acylglycerol mixtures. <i>European Journal of Lipid Science and Technology</i> , <b>2003</b> , 105, 502-507   | 3    | 88        |
| 163 | Relationships between the Composition of Edible Oils and Lard and the Ratio of the Absorbance of Specific Bands of Their Fourier Transform Infrared Spectra. Role of Some Bands of the Fingerprint Region. <i>Journal of Agricultural and Food Chemistry</i> , <b>1998</b> , 46, 1788-1793 | 5.7  | 87        |

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| 162 | A Review of Thermo-Oxidative Degradation of Food Lipids Studied by $^1\text{H}$ NMR Spectroscopy: Influence of Degradative Conditions and Food Lipid Nature. <i>Comprehensive Reviews in Food Science and Food Safety</i> , <b>2014</b> , 13, 838-859  | 16.4 | 85 |
| 161 | Characterisation of the Essential Oils of some Cultivated Aromatic Plants of Industrial Interest. <i>Journal of the Science of Food and Agriculture</i> , <b>1996</b> , 70, 359-363  | 4.3  | 85 |
| 160 | Detection of primary and secondary oxidation products by Fourier transform infrared spectroscopy (FTIR) and $^1\text{H}$ nuclear magnetic resonance (NMR) in sunflower oil during storage. <i>Journal of Agricultural and Food Chemistry</i> , <b>2007</b> , 55, 10729-36                            | 5.7  | 84 |
| 159 | Edible oils: discrimination by $^1\text{H}$ nuclear magnetic resonance. <i>Journal of the Science of Food and Agriculture</i> , <b>2003</b> , 83, 338-346  | 4.3  | 84 |
| 158 | Formation of oxygenated $\alpha,\beta$ -unsaturated aldehydes and other toxic compounds in sunflower oil oxidation at room temperature in closed receptacles. <i>Food Chemistry</i> , <b>2008</b> , 111, 157-164   | 8.5  | 83 |
| 157 | Study of the volatile composition of an aqueous oak smoke preparation. <i>Food Chemistry</i> , <b>2002</b> , 79, 283-285   | 8.5  | 81 |
| 156 | Study of the composition of the different parts of a Spanish <i>Thymus vulgaris</i> L. plant. <i>Food Chemistry</i> , <b>1998</b> , 63, 373-383  | 8.5  | 80 |
| 155 | Oxidation of corn oil at room temperature: Primary and secondary oxidation products and determination of their concentration in the oil liquid matrix from $^1\text{H}$ nuclear magnetic resonance data. <i>Food Chemistry</i> , <b>2009</b> , 116, 183-192  | 8.5  | 76 |
| 154 | Study by $^1\text{H}$ NMR spectroscopy of the evolution of extra virgin olive oil composition submitted to frying temperature in an industrial fryer for a prolonged period of time. <i>Food Chemistry</i> , <b>2012</b> , 134, 162-172  | 8.5  | 73 |
| 153 | Analysis of hydroperoxides, aldehydes and epoxides by $^1\text{H}$ nuclear magnetic resonance in sunflower oil oxidized at 70 and 100 degrees C. <i>Journal of Agricultural and Food Chemistry</i> , <b>2010</b> , 58, 6234-6245   | 8.5  | 72 |
| 152 | Monitoring the oxidation of unsaturated oils and formation of oxygenated aldehydes by proton NMR. <i>European Journal of Lipid Science and Technology</i> , <b>2005</b> , 107, 36-47   | 3    | 72 |
| 151 | Study of both sunflower oil and its headspace throughout the oxidation process. Occurrence in the headspace of toxic oxygenated aldehydes. <i>Journal of Agricultural and Food Chemistry</i> , <b>2005</b> , 53, 1093-1097   | 3    | 70 |
| 150 | Formation of hydroperoxy- and hydroxyalkenals during thermal oxidative degradation of sesame oil monitored by proton NMR. <i>European Journal of Lipid Science and Technology</i> , <b>2004</b> , 106, 680-687   | 3    | 70 |
| 149 | Contribution to further understanding of the evolution of sunflower oil submitted to frying temperature in a domestic fryer: study by $^1\text{H}$ nuclear magnetic resonance. <i>Journal of Agricultural and Food Chemistry</i> , <b>2009</b> , 57, 7790-9  | 5.7  | 66 |
| 148 | Volatile components of raw and smoked black bream ( <i>Brama raii</i> ) and rainbow trout ( <i>Oncorhynchus mykiss</i> ) studied by means of solid phase microextraction and gas chromatography/mass spectrometry. <i>Journal of the Science of Food and Agriculture</i> , <b>2002</b> , 82, 945-952 | 4.3  | 66 |
| 147 | Polycyclic aromatic hydrocarbons in liquid smoke flavorings obtained from different types of wood. Effect of storage in polyethylene flasks on their concentrations. <i>Journal of Agricultural and Food Chemistry</i> , <b>2000</b> , 48, 5083-7  | 5.7  | 66 |
| 146 | Study of a Commercial Liquid Smoke Flavoring by Means of Gas Chromatography/Mass Spectrometry and Fourier Transform Infrared Spectroscopy. <i>Journal of Agricultural and Food Chemistry</i> , <b>1995</b> , 43, 463-468   | 5.7  | 66 |
| 145 | Polycyclic aromatic hydrocarbons and olive pomace oil. <i>Journal of Agricultural and Food Chemistry</i> , <b>2004</b> , 52, 2123-32   | 5.7  | 64 |

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| 144 | Texture profile analysis of meat products treated with commercial liquid smoke flavourings. <i>Food Control</i> , <b>2004</b> , 15, 457-461  | 6.2 | 62 |
| 143 | Oxidation process of oils with high content of linoleic acyl groups and formation of toxic hydroperoxy- and hydroxyalkenals. A study by <sup>1</sup> H nuclear magnetic resonance. <i>Journal of the Science of Food and Agriculture</i> , <b>2005</b> , 85, 2413-2420 | 4.3 | 61 |
| 142 | Textural properties of raw Atlantic salmon ( <i>Salmo salar</i> ) at three points along the fillet, determined by different methods. <i>Food Control</i> , <b>2006</b> , 17, 511-515   | 6.2 | 58 |
| 141 | Study of the effects of smoke flavourings on the oxidative stability of the lipids of pork adipose tissue by means of Fourier transform infrared spectroscopy. <i>Meat Science</i> , <b>2004</b> , 66, 647-57  | 6.4 | 58 |
| 140 | Study of the effectiveness of 27 organic solvents in the extraction of coal tar pitches. <i>Energy &amp; Fuels</i> , <b>1991</b> , 5, 188-192  | 4.1 | 57 |
| 139 | Direct study of minor extra-virgin olive oil components without any sample modification. <sup>1</sup> H NMR multisupression experiment: A powerful tool. <i>Food Chemistry</i> , <b>2017</b> , 228, 301-314  | 8.5 | 56 |
| 138 | Fourier transform infrared study of coal tar pitches. <i>Fuel</i> , <b>1995</b> , 74, 1595-1598  | 7.1 | 55 |
| 137 | Excess enthalpies and excess volumes of n-hexane + and of tetrachloromethane + furan, + 1,4-dioxane, + tetrahydrofuran, and + tetrahydropyran. <i>Journal of Chemical Thermodynamics</i> , <b>1978</b> , 10, 567-576   | 2.9 | 55 |
| 136 | Formation of toxic alkylbenzenes in edible oils submitted to frying temperature. <i>Food Research International</i> , <b>2010</b> , 43, 2161-2170  | 7   | 52 |
| 135 | Quality of farmed and wild sea bass lipids studied by ( <sup>1</sup> )H NMR: usefulness of this technique for differentiation on a qualitative and a quantitative basis. <i>Food Chemistry</i> , <b>2012</b> , 135, 1583-91  | 8.5 | 50 |
| 134 | Polycyclic aromatic compounds: extraction and determination in food. <i>Food Additives and Contaminants</i> , <b>1994</b> , 11, 669-84   |     | 50 |
| 133 | Fate in digestion in vitro of several food components, including some toxic compounds coming from omega-3 and omega-6 lipids. <i>Food and Chemical Toxicology</i> , <b>2011</b> , 49, 115-24   | 4.7 | 49 |
| 132 | Characterization of coal tar pitches with different softening points by NMR. <i>Fuel Processing Technology</i> , <b>1998</b> , 58, 1-15  | 7.2 | 49 |
| 131 | Determination of polycyclic aromatic hydrocarbons in commercial liquid smoke flavorings of different compositions by gas chromatography-mass spectrometry. <i>Journal of Agricultural and Food Chemistry</i> , <b>2000</b> , 48, 126-31                                | 5.7 | 49 |
| 130 | Headspace volatile components of smoked swordfish ( <i>Xiphias gladius</i> ) and cod ( <i>Gadus morhua</i> ) detected by means of solid phase microextraction and gas chromatography-mass spectrometry. <i>Food Chemistry</i> , <b>2006</b> , 94, 151-156              | 8.5 | 48 |
| 129 | Study of the oxidative stability of salted and unsalted salmon fillets by <sup>1</sup> H nuclear magnetic resonance. <i>Food Chemistry</i> , <b>2004</b> , 86, 297-304   | 8.5 | 48 |
| 128 | Usefulness of ( <sup>1</sup> )H NMR in assessing the extent of lipid digestion. <i>Food Chemistry</i> , <b>2015</b> , 179, 182-90  | 8.5 | 46 |
| 127 | Textural and physicochemical changes in salmon ( <i>Salmo salar</i> ) treated with commercial liquid smoke flavourings. <i>Food Chemistry</i> , <b>2007</b> , 100, 498-503   | 8.5 | 46 |

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| 126 | Carbohydrate and nitrogenated compounds in liquid smoke flavorings. <i>Journal of Agricultural and Food Chemistry</i> , <b>2001</b> , 49, 2395-403   | 5.7 | 43 |
| 125 | 1H NMR and FTIR Spectroscopic Studies of Bitumen and Shale Oil from Selected Spanish Oil Shales. <i>Energy &amp; Fuels</i> , <b>1996</b> , 10, 77-84   | 4.1 | 43 |
| 124 | Study of the oxidative degradation of farmed salmon lipids by means of Fourier transform infrared spectroscopy. Influence of salting. <i>Journal of the Science of Food and Agriculture</i> , <b>2004</b> , 84, 1528-1534  | 4.3 | 42 |
| 123 | Volatile compounds generated in corn oil stored at room temperature. Presence of toxic compounds. <i>European Journal of Lipid Science and Technology</i> , <b>2014</b> , 116, 395-406   | 3   | 41 |
| 122 | Volatile Components of Aqueous Liquid Smokes from <i>Vitis vinifera</i> L Shoots and <i>Fagus sylvatica</i> L Wood. <i>Journal of the Science of Food and Agriculture</i> , <b>1996</b> , 72, 104-110  | 4.3 | 40 |
| 121 | Evidence of the formation of light polycyclic aromatic hydrocarbons during the oxidation of edible oils in closed containers at room temperature. <i>Journal of Agricultural and Food Chemistry</i> , <b>2008</b> , 56, 2028-2033  | 5.7 | 38 |
| 120 | Study by means of 1H nuclear magnetic resonance of the oxidation process undergone by edible oils of different natures submitted to microwave action. <i>Food Chemistry</i> , <b>2006</b> , 96, 665-674  | 8.5 | 38 |
| 119 | Study of the components of a solid smoke flavouring preparation. <i>Food Chemistry</i> , <b>1996</b> , 55, 251-257   | 8.5 | 38 |
| 118 | Polynuclear aromatic hydrocarbon retention indices on SE-54 stationary phase of the volatile components of a coal tar pitch. <i>Journal of Chromatography A</i> , <b>1992</b> , 591, 287-295   | 4.5 | 38 |
| 117 | Simultaneous control of the evolution of the percentage in weight of polar compounds, iodine value, acyl groups proportions and aldehydes concentrations in sunflower oil submitted to frying temperature in an industrial fryer. <i>Food Control</i> , <b>2012</b> , 24, 50-56  | 6.2 | 37 |
| 116 | Monitoring of heat-induced degradation of edible oils by proton NMR. <i>European Journal of Lipid Science and Technology</i> , <b>2008</b> , 110, 52-60  | 3   | 37 |
| 115 | Components detected by means of solid-phase microextraction and gas chromatography/mass spectrometry in the headspace of artisan fresh goat cheese smoked by traditional methods. <i>Journal of Dairy Science</i> , <b>2004</b> , 87, 284-99   | 4   | 37 |
| 114 | Capillary gas chromatographic and combined gas chromatography/mass spectrometric study of the volatile fraction of a coal tar pitch using OV-1701 stationary phase. <i>Journal of Chromatography A</i> , <b>1991</b> , 539, 157-167  | 4.5 | 37 |
| 113 | The influence of frying technique, cooking oil and fish species on the changes occurring in fish lipids and oil during shallow-frying, studied by 1H NMR. <i>Food Research International</i> , <b>2016</b> , 84, 150-159   | 7   | 37 |
| 112 | Changes provoked by boiling, steaming and sous-vide cooking in the lipid and volatile profile of European sea bass. <i>Food Research International</i> , <b>2017</b> , 99, 630-640   | 7   | 36 |
| 111 | Characterization of cod liver oil by spectroscopic techniques. New approaches for the determination of compositional parameters, acyl groups, and cholesterol from 1H nuclear magnetic resonance and Fourier transform infrared spectral data. <i>Journal of Agricultural and Food Chemistry</i> , <b>2008</b> , 56, 8470-8476 | 5.7 | 36 |
| 110 | Use of an in vitro digestion model to study the bioaccessibility of 4-hydroxy-2-nonenal and related aldehydes present in oxidized oils rich in omega-6 acyl groups. <i>Journal of Agricultural and Food Chemistry</i> , <b>2008</b> , 56, 8475-83  | 5.7 | 36 |
| 109 | Influence of the moisture content on the composition of the liquid smoke produced in the pyrolysis process of <i>Fagus sylvatica</i> L. wood. <i>Journal of Agricultural and Food Chemistry</i> , <b>1999</b> , 47, 4126-36  | 5.7 | 36 |

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| 108 | Monitoring by <sup>1</sup> H nuclear magnetic resonance of the changes in the composition of virgin linseed oil heated at frying temperature. Comparison with the evolution of other edible oils. <i>Food Control</i> , <b>2012</b> , 28, 59-68   | 6.2  | 35 |
| 107 | Occurrence of polycyclic aromatic hydrocarbons in smoked cheese. <i>Journal of Dairy Science</i> , <b>2004</b> , 87, 556-64   | 4    | 35 |
| 106 | Relationships between the Maximum Temperature Reached in the Smoke Generation Processes from <i>Vitis vinifera</i> L. Shoot Sawdust and Composition of the Aqueous Smoke Flavoring Preparations Obtained. <i>Journal of Agricultural and Food Chemistry</i> , <b>1996</b> , 44, 1302-1307 | 5.7  | 35 |
| 105 | Study by proton nuclear magnetic resonance of the thermal oxidation of oils rich in oleic acyl groups. <i>JAOCs, Journal of the American Oil Chemists Society</i> , <b>2005</b> , 82, 349-355   | 1.8  | 34 |
| 104 | Smoke and liquid smoke. Study of an aqueous smoke flavouring from the aromatic plant <i>Thymus vulgaris</i> L. <i>Journal of the Science of Food and Agriculture</i> , <b>1999</b> , 79, 1267-1274  | 4.3  | 34 |
| 103 | Extractable components of the aerial parts of <i>Salvia lavandulifolia</i> and composition of the liquid smoke flavoring obtained from them. <i>Journal of Agricultural and Food Chemistry</i> , <b>1999</b> , 47, 3016-27  | 5.7  | 34 |
| 102 | Prediction of Kovats retention index of saturated alcohols on stationary phases of different polarity. <i>Analytical Chemistry</i> , <b>1987</b> , 59, 94-97  | 7.8  | 34 |
| 101 | Food lipid oxidation under gastrointestinal digestion conditions: A review. <i>Critical Reviews in Food Science and Nutrition</i> , <b>2020</b> , 60, 461-478   | 11.5 | 33 |
| 100 | Prooxidant effect of $\pm$ -tocopherol on soybean oil. Global monitoring of its oxidation process under accelerated storage conditions by <sup>1</sup> H nuclear magnetic resonance. <i>Food Chemistry</i> , <b>2018</b> , 245, 312-323   | 8.5  | 32 |
| 99  | A study of several parts of the plant <i>Foeniculum vulgare</i> as a source of compounds with industrial interest. <i>Food Research International</i> , <b>1996</b> , 29, 85-88   | 7    | 32 |
| 98  | Flame ionization detection relative response factors of some polycyclic aromatic compounds. <i>Journal of Chromatography A</i> , <b>1992</b> , 607, 295-302   | 4.5  | 32 |
| 97  | A study by (1)H NMR on the influence of some factors affecting lipid in vitro digestion. <i>Food Chemistry</i> , <b>2016</b> , 211, 17-26   | 8.5  | 31 |
| 96  | GC/MS analysis of lignin monomers, dimers and trimers in liquid smoke flavourings. <i>Journal of the Science of Food and Agriculture</i> , <b>1999</b> , 79, 1889-1903  | 4.3  | 30 |
| 95  | Deep-frying food in extra virgin olive oil: a study by (1)H nuclear magnetic resonance of the influence of food nature on the evolving composition of the frying medium. <i>Food Chemistry</i> , <b>2014</b> , 150, 429-37  | 8.5  | 29 |
| 94  | Composition of the extract in dichloromethane of the aerial parts of a Spanish wild growing plant <i>Thymus vulgaris</i> L.. <i>Flavour and Fragrance Journal</i> , <b>1998</b> , 13, 259-262   | 2.5  | 29 |
| 93  | Empirical multiparameter relationships between retention indices and physicochemical properties of alkylbenzenes. <i>Chromatographia</i> , <b>1983</b> , 17, 664-668  | 2.1  | 29 |
| 92  | Characterisation of the lipidic components of margarines by <sup>1</sup> H Nuclear Magnetic Resonance. <i>Food Chemistry</i> , <b>2013</b> , 141, 3357-64   | 8.5  | 28 |
| 91  | Utilization of Physico-Chemical Properties and Structural Parameters for Calculating Retention Indices of Alkylbenzenes. <i>Journal of Chromatographic Science</i> , <b>1984</b> , 22, 252-255  | 1.4  | 28 |

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| 90 | A new methodology capable of characterizing most volatile and less volatile minor edible oils components in a single chromatographic run without solvents or reagents. Detection of new components. <i>Food Chemistry</i> , <b>2017</b> , 221, 1135-1144                    | 8.5 | 27 |
| 89 | Chemical references in sensory analysis of smoke flavourings. <i>Food Chemistry</i> , <b>2002</b> , 78, 433-442   | 8.5 | 26 |
| 88 | Usefulness of the frequencies of some Fourier transform infrared spectroscopic bands for evaluating the composition of edible oil mixtures. <i>Lipid - Fett</i> , <b>1999</b> , 101, 71-76  |     | 26 |
| 87 | Volatile components of several virgin and refined oils differing in their botanical origin. <i>Journal of the Science of Food and Agriculture</i> , <b>2011</b> , 91, 1871-84   | 4.3 | 25 |
| 86 | Characterization of the components of a salty smoke flavouring preparation. <i>Food Chemistry</i> , <b>1997</b> , 58, 97-102  | 8.5 | 25 |
| 85 | Pyrolytic behaviour of Spanish oil shales and their kerogens. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2000</b> , 56, 1-21   | 6   | 25 |
| 84 | Analysis of coal tar pitch: relations between thermal behaviour and composition. <i>Fuel</i> , <b>1996</b> , 75, 1101-1107  |     | 25 |
| 83 | Extension of the method of iterative partial equalization of orbital electronegativity to small ring systems. <i>Tetrahedron</i> , <b>1983</b> , 39, 1331-1335  | 2.4 | 25 |
| 82 | Farmed and wild sea bass ( <i>Dicentrarchus labrax</i> ) volatile metabolites: a comparative study by SPME-GC/MS. <i>Journal of the Science of Food and Agriculture</i> , <b>2016</b> , 96, 1181-93   | 4.3 | 24 |
| 81 | Behaviour of non-oxidized and oxidized flaxseed oils, as models of omega-3 rich lipids, during in vitro digestion. Occurrence of epoxidation reactions. <i>Food Research International</i> , <b>2017</b> , 97, 104-115  | 7   | 22 |
| 80 | A study by <sup>1</sup> H nuclear magnetic resonance of the influence on the frying medium composition of some soybean oil-food combinations in deep-frying. <i>Food Research International</i> , <b>2014</b> , 55, 347-355   | 7   | 22 |
| 79 | Polyunsaturated lipids and vitamin A oxidation during cod liver oil in vitro gastrointestinal digestion. Antioxidant effect of added BHT. <i>Food Chemistry</i> , <b>2017</b> , 232, 733-743  | 8.5 | 21 |
| 78 | <sup>1</sup> H NMR and SPME-GC/MS study of hydrolysis, oxidation and other reactions occurring during in vitro digestion of non-oxidized and oxidized sunflower oil. Formation of hydroxy-octadecadienoates. <i>Food Research International</i> , <b>2017</b> , 91, 171-182 | 7   | 21 |
| 77 | Effects of different cooking methods on the lipids and volatile components of farmed and wild European sea bass ( <i>Dicentrarchus labrax</i> ). <i>Food Research International</i> , <b>2018</b> , 103, 48-58  | 7   | 21 |
| 76 | Load of polycyclic aromatic hydrocarbons in edible vegetable oils: importance of alkylated derivatives. <i>Journal of Food Protection</i> , <b>2004</b> , 67, 1904-13   | 2.5 | 21 |
| 75 | Headspace solid-phase microextraction as a tool to estimate the contamination of smoked cheeses by polycyclic aromatic hydrocarbons. <i>Journal of Dairy Science</i> , <b>2005</b> , 88, 13-20  | 4   | 20 |
| 74 | Preliminary results of extraction experiments in an oil shale. <i>Organic Geochemistry</i> , <b>1992</b> , 18, 313-316  | 3.1 | 20 |
| 73 | Gas chromatography of deuterated and protiated chloro derivatives of 1,4-dimethylbenzene. <i>Journal of Chromatography A</i> , <b>1986</b> , 351, 425-432   | 4.5 | 20 |

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| 72 | Fourier transform infrared spectroscopy as a tool to study farmed and wild sea bass lipid composition. <i>Journal of the Science of Food and Agriculture</i> , <b>2014</b> , 94, 1340-8   | 4.3 | 19 |
| 71 | Characteristics of smoke flavourings obtained from mixtures of oak ( <i>Quercus</i> sp.) wood and aromatic plants ( <i>Thymus vulgaris</i> L. and <i>Salvia lavandulifolia</i> Vahl.). <i>Flavour and Fragrance Journal</i> , <b>2005</b> , 20, 676-685 | 2.5 | 19 |
| 70 | Prediction of gas chromatographic retention indices of linear, branched, and cyclic alkanes from their physicochemical properties. <i>Journal of High Resolution Chromatography</i> , <b>1984</b> , 7, 191-195  |     | 19 |
| 69 | Contamination of cheese by polycyclic aromatic hydrocarbons in traditional smoking. Influence of the position in the smokehouse on the contamination level of smoked cheese. <i>Journal of Dairy Science</i> , <b>2011</b> , 94, 1679-90                | 4   | 18 |
| 68 | Physicochemical, sensorial and textural characteristics of liquid-smoked salmon ( <i>Salmo salar</i> ) as affected by salting treatment and sugar addition. <i>International Journal of Food Science and Technology</i> , <b>2012</b> , 47, 1086-1096   | 3.8 | 17 |
| 67 | Headspace composition of cod liver oil and its evolution in storage after opening. First evidence of the presence of toxic aldehydes. <i>Food Chemistry</i> , <b>2009</b> , 114, 1291-1300  | 8.5 | 17 |
| 66 | Components detected by headspace-solid phase microextraction in artisanal fresh goat cheese smoked using dry prickly pear ( <i>Opuntia ficus indica</i> ). <i>Dairy Science and Technology</i> , <b>2004</b> , 84, 385-397                              |     | 17 |
| 65 | Occurrence of polycyclic aromatic hydrocarbons in artisanal Palmero cheese smoked with two types of vegetable matter. <i>Journal of Dairy Science</i> , <b>2007</b> , 90, 2717-25   | 4   | 16 |
| 64 | Volatile components obtained from the leaves of <i>Jasonia glutinosa</i> . <i>Food Chemistry</i> , <b>1996</b> , 56, 155-158  | 8.5 | 16 |
| 63 | A study of Kovats retention indices of aliphatic saturated esters and their relation to the polarity of the stationary phase. <i>Journal of Chromatography A</i> , <b>1985</b> , 318, 187-194   | 4.5 | 16 |
| 62 | Effect of the presence of protein on lipolysis and lipid oxidation occurring during in vitro digestion of highly unsaturated oils. <i>Food Chemistry</i> , <b>2017</b> , 235, 21-33   | 8.5 | 15 |
| 61 | Relation between solubility of coal tar pitches and composition of their volatile fraction. <i>Fuel</i> , <b>1994</b> , 73, 510-514   | 7.1 | 15 |
| 60 | Fish in Vitro Digestion: Influence of Fish Salting on the Extent of Lipolysis, Oxidation, and Other Reactions. <i>Journal of Agricultural and Food Chemistry</i> , <b>2017</b> , 65, 879-891  | 5.7 | 14 |
| 59 | Metabolite release and protein hydrolysis during the in vitro digestion of cooked sea bass fillets. A study by <sup>1</sup> H NMR. <i>Food Research International</i> , <b>2016</b> , 88, 293-301   | 7   | 14 |
| 58 | Sensorial and Physicochemical Characteristics of Salmon ( <i>Salmo salar</i> ) Treated by Different Smoking Processes during Storage. <i>Food Science and Technology International</i> , <b>2007</b> , 13, 477-484                                      | 2.6 | 14 |
| 57 | Study of several aspects of a general method for the determination of polycyclic aromatic hydrocarbons in liquid smoke flavourings by gas chromatography-mass spectrometry. <i>Food Additives and Contaminants</i> , <b>2000</b> , 17, 27-44            |     | 14 |
| 56 | Temperature programmed retention indices of some PAHs on capillary columns coated with OV-1701 and SE-54. <i>Journal of High Resolution Chromatography</i> , <b>1989</b> , 12, 552-554  |     | 14 |
| 55 | Biparameter Equations for Calculating Kovats Retention Indices of Hydrocarbons. <i>International Journal of Environmental Analytical Chemistry</i> , <b>1985</b> , 23, 77-86  | 1.8 | 14 |

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|----|---|-----|----|
| 54 | <sup>1</sup> H Nuclear Magnetic Resonance monitoring of the degradation of margarines of varied compositions when heated to high temperature. <i>Food Chemistry</i> , <b>2014</b> , 165, 119-28   | 8.5 | 13 |
| 53 | Evidence for hydrogen donor-acceptor behaviour of 9,10-dihydroanthracene in thermal reactions with coals and pitches. <i>Fuel Processing Technology</i> , <b>1990</b> , 24, 157-162   | 7.2 | 13 |
| 52 | Bioactive compounds detected for the first time in corn oil: Cyclic dipeptides and other nitrogenated compounds. <i>Journal of Food Composition and Analysis</i> , <b>2017</b> , 62, 197-204  | 4.1 | 12 |
| 51 | Effect of liquid smoking on lipid hydrolysis and oxidation reactions during in vitro gastrointestinal digestion of European sea bass. <i>Food Research International</i> , <b>2017</b> , 97, 51-61  | 7   | 12 |
| 50 | Monitoring of minor compounds in corn oil oxidation by direct immersion-solid phase microextraction-gas chromatography/mass spectrometry. New oil oxidation markers. <i>Food Chemistry</i> , <b>2019</b> , 290, 286-294                                   | 8.5 | 12 |
| 49 | <sup>1</sup> H NMR study of the changes in brine- and dry-salted sea bass lipids under thermo-oxidative conditions: Both salting methods reduce oxidative stability. <i>European Journal of Lipid Science and Technology</i> , <b>2015</b> , 117, 440-449 | 3   | 12 |
| 48 | Semiquantitative gas chromatographic analysis of the volatile fraction in several extracts obtained by treatment of coal tar pitches with different organic solvents. <i>Fuel</i> , <b>1995</b> , 74, 233-240   | 7.1 | 12 |
| 47 | A thorough insight into the complex effect of gamma-tocopherol on the oxidation process of soybean oil by means of H Nuclear Magnetic Resonance. Comparison with alpha-tocopherol. <i>Food Research International</i> , <b>2018</b> , 114, 230-239        | 7   | 11 |
| 46 | Effect of adding alpha-tocopherol on the oxidation advance during in vitro gastrointestinal digestion of sunflower and flaxseed oils. <i>Food Research International</i> , <b>2019</b> , 125, 108558  | 7   | 11 |
| 45 | Effect of freezing on the physicochemical, textural and sensorial characteristics of salmon ( <i>Salmo salar</i> ) smoked with a liquid smoke flavouring. <i>LWT - Food Science and Technology</i> , <b>2010</b> , 43, 910-918                            | 5.4 | 11 |
| 44 | A study of the toxic effect of oxidized sunflower oil containing 4-hydroperoxy-2-nonenal and 4-hydroxy-2-nonenal on cortical TrkA receptor expression in rats. <i>Nutritional Neuroscience</i> , <b>2009</b> , 12, 249-59                                 | 3.6 | 11 |
| 43 | Study of relationships between solvent effectiveness in coal tar pitch extractions and solvent solubility parameters. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1991</b> , 30, 1579-1582  | 3.9 | 11 |
| 42 | Polycyclic aromatic hydrocarbons in diverse foods. <b>2003</b> , 175-198  |     | 11 |
| 41 | Monitoring compositional changes in sunflower oil-derived deep-frying media by <sup>1</sup> H Nuclear Magnetic Resonance. <i>European Journal of Lipid Science and Technology</i> , <b>2016</b> , 118, 984-996  | 3   | 11 |
| 40 | Deep-frying. A study of the influence of the frying medium and the food nature, on the lipidic composition of the fried food, using <sup>1</sup> H nuclear magnetic resonance. <i>Food Research International</i> , <b>2014</b> , 62, 998-1007            | 7   | 10 |
| 39 | Comparative petrographic and geochemical study of the Puertollano oil shale kerogens. <i>Organic Geochemistry</i> , <b>1996</b> , 24, 309-321   | 3.1 | 10 |
| 38 | Identification and determination of the different types of hydrogen and carbon atoms in the soluble organic matter of the Puertollano oil shale. <i>Organic Geochemistry</i> , <b>1992</b> , 18, 155-160  | 3.1 | 10 |
| 37 | Capillary gas chromatography of some polycyclic aromatic compounds on several stationary phases. <i>Journal of Chromatography A</i> , <b>1989</b> , 465, 378-385  | 4.5 | 10 |

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|----|--|-----|---|
| 36 | Influence of minor components on lipid bioaccessibility and oxidation during in vitro digestion of soybean oil. <i>Journal of the Science of Food and Agriculture</i> , <b>2019</b> , 99, 4793-4800  | 4.3 | 9 |
| 35 | Relationships between the evolution of the percentage in weight of polar compounds and that of the molar percentage of acyl groups of edible oils submitted to frying temperature. <i>Food Chemistry</i> , <b>2013</b> , 138, 1351-4   | 8.5 | 9 |
| 34 | The chromatographic behaviour of cycloolefins on stationary phases of different polarity. Prediction of their retention indices and boiling points. <i>Chromatographia</i> , <b>1987</b> , 23, 33-37   | 2.1 | 9 |
| 33 | Characteristics of dry- and brine-salted salmon later treated with liquid smoke flavouring. <i>Agricultural and Food Science</i> , <b>2011</b> , 20, 217   | 2   | 9 |
| 32 | Aldehydes after Prolonged Heating at Frying Temperature <b>2015</b> , 251-258  |     | 8 |
| 31 | A very simple, fast, and non-destructive approach to predict the time at which edible oils submitted to high temperature reach the established limits of safety. <i>Food Chemistry</i> , <b>2011</b> , 127, 802-6  | 8.5 | 8 |
| 30 | Some changes in an aqueous liquid smoke flavouring during storage in polythene receptacles. <i>Zeitschrift Fur Lebensmittel-Untersuchung Und -Forschung</i> , <b>1996</b> , 202, 24-29   |     | 8 |
| 29 | Effect of the Enrichment of Corn Oil with - or -Tocopherol on Its Digestion Studied by H NMR and SPME-GC/MS; Formation of Hydroperoxy-, Hydroxy-, Keto-Dienes and Keto--epoxy--Monoenes in the more -Tocopherol Enriched Samples. <i>Antioxidants</i> , <b>2020</b> , 9,   | 7.1 | 7 |
| 28 | Study of the In Vitro Digestion of Olive Oil Enriched or Not with Antioxidant Phenolic Compounds. Relationships between Bioaccessibility of Main Components of Different Oils and Their Composition. <i>Antioxidants</i> , <b>2020</b> , 9,  | 7.1 | 7 |
| 27 | Characterization of the Gyr oil shale-derived asphaltenes and pre-asphaltenes by <sup>1</sup> H and <sup>13</sup> C nuclear magnetic resonance and by gas chromatography. <i>Fuel Processing Technology</i> , <b>1995</b> , 43, 111-122  | 7.2 | 7 |
| 26 | Empirical multiparametric relationships between coal tar pitch extraction yields in organic solvents and solubility parameter components of the solvents. <i>Fuel</i> , <b>1992</b> , 71, 295-297  | 7.1 | 7 |
| 25 | Some compounds detected for the first time in oak wood extracts by GC/MS. <i>Sciences Des Aliments</i> , <b>2001</b> , 21, 65-70   |     | 7 |
| 24 | Effect of Smoking Using Smoke Flavorings on Several Characteristics of Farmed Sea Bass ( <i>Dicentrarchus labrax</i> ) Fillets and on their Evolution During Vacuum-Packed Storage at Refrigeration Temperature. <i>Journal of Food Processing and Preservation</i> , <b>2017</b> , 41, e12800                             | 2.1 | 6 |
| 23 | Complexity and uniqueness of the aromatic profile of smoked and unsmoked Herre cheese. <i>Molecules</i> , <b>2014</b> , 19, 7937-58  | 4.8 | 6 |
| 22 | Influence of different salting processes on the evolution of the volatile metabolites of vacuum-packed fillets of farmed and wild sea bass ( <i>Dicentrarchus labrax</i> ) stored under refrigeration conditions: a study by SPME-GC/MS. <i>Journal of the Science of Food and Agriculture</i> , <b>2017</b> , 97, 967-976 | 4.3 | 5 |
| 21 | A Global Study by H NMR Spectroscopy and SPME-GC/MS of the in Vitro Digestion of Virgin Flaxseed Oil Enriched or not with Mono-, Di- or Tri-Phenolic Derivatives. Antioxidant Efficiency of These Compounds. <i>Antioxidants</i> , <b>2020</b> , 9,  | 7.1 | 5 |
| 20 | Influence of fat and phytosterols concentration in margarines on their degradation at high temperature. A study by (1)H Nuclear Magnetic Resonance. <i>Food Chemistry</i> , <b>2016</b> , 197 Pt B, 1256-63  | 8.5 | 5 |
| 19 | Occurrence of Polycyclic Aromatic Hydrocarbons in Smoke Flavourings. <i>Polycyclic Aromatic Compounds</i> , <b>2000</b> , 21, 215-229  | 1.3 | 5 |

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|----|---|-------|
| 18 | Kováts retention indices of selected mono and polycyclic olefins. <i>Journal of High Resolution Chromatography</i> , <b>1987</b> , 10, 461-463  | 5     |
| 17 | Capillary gas chromatography of chloro derivatives of 1,4-Dimethylbenzene Separation, identification and prediction of boiling points. <i>Journal of Chromatography A</i> , <b>1985</b> , 331, 237-243  | 4.5 5 |
| 16 | Enrichment of Sunflower Oil with $\alpha$ -Tocopherol. Study by $^1\text{H}$ NMR of Its Effect Under Accelerated Storage Conditions. <i>European Journal of Lipid Science and Technology</i> , <b>2019</b> , 121, 1800457   | 3 4   |
| 15 | Oxidative stability of extra-virgin olive oil enriched or not with lycopene. Importance of the initial quality of the oil for its performance during in vitro gastrointestinal digestion. <i>Food Research International</i> , <b>2020</b> , 130, 108987                        | 7 4   |
| 14 | The key role of ovalbumin in lipid bioaccessibility and oxidation product profile during the in vitro digestion of slightly oxidized soybean oil. <i>Food and Function</i> , <b>2019</b> , 10, 4440-4451  | 6.1 4 |
| 13 | Nature and distribution of the volatile components in the different regions of an artisanal ripened sheep cheese. <i>Journal of Dairy Research</i> , <b>2012</b> , 79, 102-9  | 1.6 4 |
| 12 | The estimation of the solubility parameter of low volatile compounds from gas chromatography data. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2007</b> , 37, 101-109  | 3.5 4 |
| 11 | Chromatographic study of methylcyclopentadiene dimers and iso-dimers and determination of their boiling points. <i>Journal of Chromatography A</i> , <b>1990</b> , 508, 363-374   | 4.5 4 |
| 10 | Some of the most significant changes in the Fourier transform infrared spectra of edible oils under oxidative conditions <b>2000</b> , 80, 2028   | 4     |
| 9  | A Dual Perspective of the Action of Lysine on Soybean Oil Oxidation Process Obtained by Combining $^1\text{H}$ NMR and LC-MS: Antioxidant Effect and Generation of Lysine-Aldehyde Adducts. <i>Antioxidants</i> , <b>2019</b> , 8,  | 7.1 2 |
| 8  | Assessment of Soybean Oil Oxidative Stability from Rapid Analysis of its Minor Component Profile. <i>Molecules</i> , <b>2020</b> , 25,  | 4.8 2 |
| 7  | Oxylipins Associated to Current Diseases Detected for the First Time in the Oxidation of Corn Oil as a Model System of Oils Rich in Omega-6 Polyunsaturated Groups. A Global, Broad and in-Depth Study by $^1\text{H}$ NMR Spectroscopy. <i>Antioxidants</i> , <b>2020</b> , 9, | 7.1 2 |
| 6  | $^1\text{H}$ NMR: A Powerful Tool for Lipid Digestion Research <b>2019</b> , 60-99  | 2     |
| 5  | The potential of lysine to extend the shelf life of soybean oil evidenced by $^1\text{H}$ Nuclear Magnetic Resonance. <i>LWT - Food Science and Technology</i> , <b>2019</b> , 105, 169-176   | 5.4 2 |
| 4  | Influence of smoking with smoke flavorings on the oxidative stability of farmed sea bass fillets monitored by $^1\text{H}$ NMR and FTIR. <i>European Journal of Lipid Science and Technology</i> , <b>2017</b> , 119, 1600023   | 3 1   |
| 3  | Oxidation Products of Corn Oil at Room Temperature <b>2015</b> , 243-249  | 1     |
| 2  | Changes provoked by nixtamalization and tortilla making in the lipids of two corn varieties. A study by $^1\text{H}$ NMR. <i>Food Chemistry</i> , <b>2020</b> , 313, 126079   | 8.5 0 |
| 1  | Some remarks about the estimation of the solubility parameter of low volatile compounds from gc data. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2007</b> , 41, 41-43   | 3.5   |

